

REPTILIA: TESTUDINES: PELOMEDUSIDAE

PELTOCEPHALUS, *P. DUMERILIANUS*

Catalogue of American Amphibians and Reptiles.

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***Peltocephalus* Duméril and Bibron**
Big-headed Amazon River Turtles

Peltocephalus Duméril and Bibron 1835:377. Type species, *Emys tracaxa* Spix 1824 (= *Emys dumeriliana* Schweigger 1812), by monotypy.

• **CONTENT.** One species, *Peltocephalus dumerilianus*, is recognized.

• **DEFINITION.** *Peltocephalus dumerilianus* is a large pelomedusid turtle, with an adult carapace length to 50 cm in males and 47 cm in females. The oval carapace is highly domed and the posterior marginals are flared in adults. Adults weigh 8–15 kg, with the skull and shell comprising a relatively high proportion of the mass. The olive brown to black carapace is smooth. A low keel anteriorly may become obliterated in old adults. The yellow to cream plastron is somewhat reduced, not fully covering the appendages. The head and limbs are dark brown to gray and without any distinct markings. Males have longer and thicker tails than females, and the opening between the anal scutes is more deeply indented in males and elliptical in shape rather than V-shaped in the female.

The head is massive, up to 10.5 cm wide in adult males. The head of males is larger and the snout more elongated than in females. A large single frontal scale covers the dorsal surface of the head from the nares posterior to the eyes. The forehead is without a groove. The head is distinctly triangular in shape with a strongly hooked upper jaw. The triturating surfaces of the jaws are not well developed. One short barbel occurs posterior to the mandibular symphysis.

Recently hatched *Peltocephalus* have a mottled brown carapace with black sutures. The distal borders of the marginal scutes are cream-yellow; proximal to the yellow markings, the outer third of each marginal scute is black. The plastron is yellow with brown mottling, and the head and limbs are a uniform dark gray with a light yellow area above and anterior to the tympanum. A distinct keel is present on the third, fourth, and fifth vertebrae. The upper jaw is distinctly hooked.

• **DESCRIPTIONS, ILLUSTRATIONS, DISTRIBUTION, FOSSIL RECORD, AND PERTINENT LITERATURE.** See species account.

• **ETYMOLOGY.** The genus name *Peltocephalus* is from the Greek *pelte*, meaning a small shield, and *kephale*, meaning head, referring to the large scales on the head of the single, included species.

***Peltocephalus dumerilianus* (Schweigger)**
Big-headed Amazon River Turtle, Cabeçudo

Emys Dumeriliana Schweigger 1812:300. Type locality, "America meridionali." Holotype, lost, formerly in the Museum National de l'Histoire Naturelle (MNHN), Paris (see **Comments**).

Emys macrocephala Spix 1824:5. Type locality, "Airon [Airão] ad ripam fluminis [Rio] Jaú, confluentis Rio Negro," Brasil. Syntypes (at least 3): Zoologisches Staatssammlung München (ZSM) 15/0 (skull, lower jaw, and three neck vertebrae from

an adult specimen, possibly male), ZSM 17/0 (adult skull without lower jaw), and Rijksmuseum van Natuurlijke Historie, Leiden (RMNH) 6164 (stuffed, adult, possible male). RMNH 6164 was chosen as the lectotype by Hoogmoed and Gruber (1983). Not examined by authors (see Vanzolini 1981).

Emys Tracaxa Spix 1824:6. Type locality, "ripam et insulas fluminis Solimoëns [Solimoes] et confluentium," Brasil. Syntypes (number uncertain): only known syntype is ZSM 16/0 (skull and lower jaw of adult female), which was chosen by Hoogmoed and Gruber (1983) as the lectotype. Not examined by authors (see Vanzolini 1981).

Emys expansa: Kaup 1828:1150 (in part).

Hydraspis Tracaxa: Bell 1828:512.

Podocnemis Dumeriliana: Wagler 1830:135.

Podocnemis Tracaxa: Wagler 1830:135.

Chelys (Hydraspis) Expansa: Gray 1830 (1831):17 (in part).

Chelys (Hydraspis) Dumerilliana: Gray 1830 (1831):17. *Lapsus*.

Emys Icterocephala: Gray 1830 (1831):17 (in error).

Chelys (Hydraspis) Lata Gray 1830 (1831):17. Type locality, "Demerara" (= Guyana). Holotype not located.

Hydraspis expansa: Gray 1831:42 (in part).



FIGURE. Female *Peltocephalus dumerilianus* from the Rio Trombetas, Pará, Brasil (photographs by R.C. Vogt).

Hydraspis Dumeriliana: Gray 1831:42 (in part).
Peltocephalus Tracaxa: Duméril and Bibron 1835:378. *Lapsus*.
Emys dumeriliana: Temminck and Schlegel 1834–1838:48.
Peltocephalus dumerilianus: Diesing 1839 (1840):237. First use of combination.
Peltocephalus Tracaxa: Fitzinger 1843:29.
Hydraspis (Podocnemis) tracaxa: Tschudi 1845:151.
Peltocephalus Tracaxa: Troschel 1848:646.
Peltocephalus Dumerilianus: Fitzinger 1864: fig. 124.
Chelonemys Dumeriliana: Gray 1872:25 (in part).
Podocnemis tracaxa: Boulenger 1889:206.
Podocnemis dumeriliana: Siebenrock 1909:566.
Peltocephalus dumeriliana: Fróes 1957:15.
Podocnemis dumeriliano: Pritchard 1964:21.
Peltocephalus macrocephala: Fretey 1975:675.
Peltocephalus tracaxus: Fretey 1977:111.

• **CONTENT.** No subspecies are recognized, although Pritchard and Trebbau (1984) mentioned a tendency for the intergular scute to be larger and to have more strongly curved sides in specimens from French Guiana and Brasil than in those from Venezuela and Colombia.

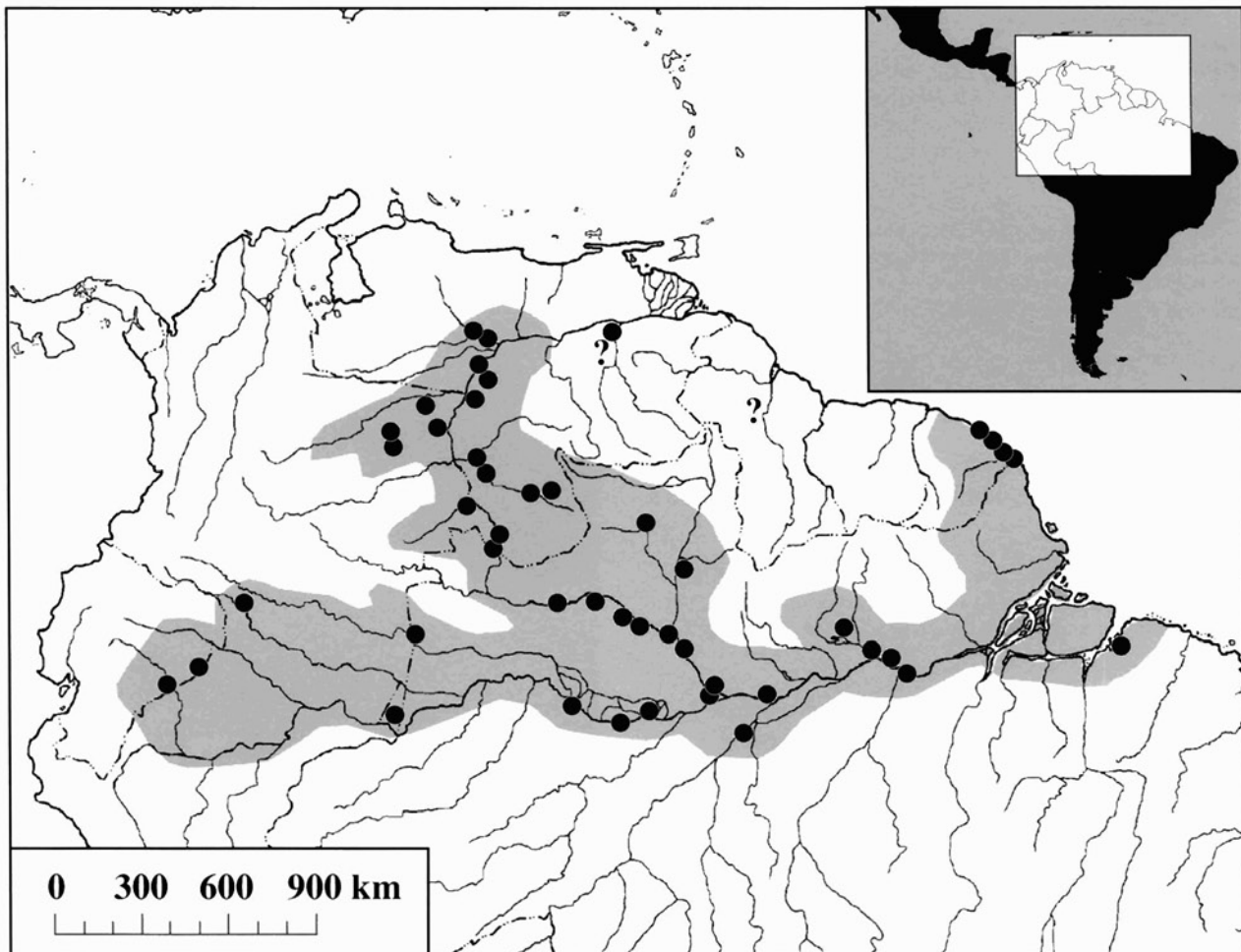
• **DEFINITION.** See generic account.

• **DESCRIPTIONS.** General descriptions are in Ernst and Barbour (1989), Fretey (1977), Neill (1965), Pritchard and Trebbau (1984), Siebenrock (1904), and Williams (1954). Other descriptions include cervical vertebrae (Williams 1950), cra-

nial arteries (Albrecht 1976), and skull morphology (Gaffney 1979). Comparisons with species of *Podocnemis* are in Siebenrock (1902), Müller (1935), and Williams (1954).

• **ILLUSTRATIONS.** Color photographs are in Bonin et al. (1996; head), Metrailler and Le Gratiot (1996; biotope, lateral view, head), Rogner (1996; head and anterior shell), and Vogt (2001; ovaries, eggs, and hatchling emerging from egg). Color drawings are in Bonin et al. (1996; lateral view). **Black and white photographs** are in Obst et al. (1984; antero-lateral view), Freiberg (1981; antero-lateral view), Mittermeier (1978; head), Neill (1965; dorsal view of juvenile), Pritchard (1979; antero-lateral view), Smith (1979; head), Vogt et al. (1994; lateral and head views), and Vogt et al. (1998; throat papillae). **Black and white drawings** are in Fretey (1977; plastral scutes, head), Gaffney (1979; skull, palate), Honegger et al. (1985; lateral view of whole animal, plastron, carapace), Pritchard (1964; dorsolateral view from Spix 1824), Pritchard and Trebbau (1984; skull and shell), Spix (1824; dorsolateral and ventral views), Siebenrock (1902; head), Wermuth and Mertens (1961; dorso-lateral and ventral views from Spix 1824), and Williams (1954; head and palate).

• **DISTRIBUTION.** *Peltocephalus dumerilianus* is found in the Orinoco to the Amazon River basins in Venezuela, eastern Colombia, eastern Ecuador, northeastern Perú, French Guiana, and Brasil (Pritchard and Trebbau 1984; Iverson 1986, 1992). Distributional information by country is available for Brasil (Hoogmoed and Avila-Pires 1990, Luederwaldt 1926, Pritchard



MAP. Distribution of *Peltocephalus dumerilianus*; the type locality is too imprecise to plot; dots mark other records.

and Trebbau 1984, Siebenrock 1904), Colombia (Medem 1958, 1960, 1968, 1983), Ecuador (Orces 1949), French Guiana (Fretey 1977, Lescure 1976, Metrailler and Le Gratiet 1996), Guyana (Pritchard 1964), and Venezuela (Pritchard and Trebbau 1984).

• **FOSSIL RECORD.** No fossils are known.

• **PERTINENT LITERATURE.** General reviews are in Ernst and Barbour (1989), Medem (1960), and Metrailler and Le Gratiet (1996). Other important references cover **habitat** (Hoogmoed and Avila-Pires 1990, Medem 1983, Pritchard and Trebbau 1984, Silva Coutinho 1986, Vogt et al. 1994), **use by humans for food** (Pérez-Emán and Paolillo 1990, Pritchard and Trebbau 1984, Smith 1979, Vogt 2001), **reproduction** (Medem 1960, 1983; Vanzolini 1977; Vogt et al. 1994; Vogt 2001), **captive maintenance** (Fretey 1977), **phylogeny** (Frair et al. 1978, Gaffney and Meylan 1988, Georges et al. 1998, Seddon et al. 1997), **chromosomes and karyotype** (Ayres et al. 1969, Rhodin et al. 1978), **diet** (Pritchard and Trebbau 1984, Pérez-Emán and Paolillo 1997, Vogt 2001), **throat papillae** (Vogt et al. 1998), **parasites** (Diesing 1839 [1840], Lainson and Naiff 1998, Yamaguti 1958), **serology** (Frair et al. 1978), **vernacular names** (Frank and Ramus 1995, Fretey 1977, Fróes 1957, Mittermeier et al. 1980, Pritchard and Trebbau 1984).

• **ETYMOLOGY.** The specific name *dumerilianus* is a patronym honoring Prof. André Marie Constant Duméril [1774–1860], French herpetologist at the Paris Museum, who published *Erpétologie générale* (1835–1851).

• **COMMENTS.** Fretey (1977) reported that the holotype of *Emys dumeriliana* was MNHN 7893, which he and Williams (1954) identified as *Podocnemis unifilis*, making *Emys tracaxa* Spix (1824) the next available name (e.g., Hoogmoed and Gruber 1983). However, Pritchard and Trebbau (1984) showed that MNHN 7893 may not be the holotype, and Hoogmoed and Gruber (1983) identified the proper syntypes of *E. tracaxa* and designated the lectotype from among them.

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